

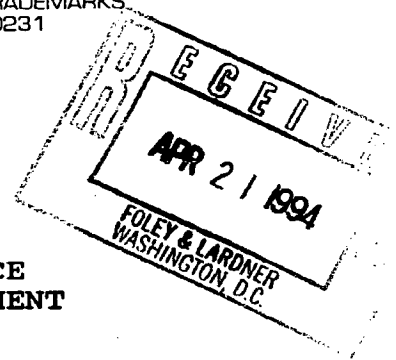


UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
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Washington, D.C. 20231

DATE: 03/24/94
TO:

N12B

STEPHEN A. BENT
FOLEY & LARDNER
3000 K STREET, N.W., STE. 500
WASHINGTON, DC 20007-5109



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ASSIGNOR:
GREENBERGER, JOEL S.

DOC DATE: 11/03/93

RECORDATION DATE: 03/16/94 NUMBER OF PAGES 003 REEL/FRAME 6883/046

DIGEST : ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:
UNIVERSITY OF PITTSBURGH
911 WILLIAM PITT UNION PITTSBURGH, PA 15260

SERIAL NUMBER 8-136079 FILING DATE 10/15/93
PATENT NUMBER ISSUE DATE 00/00/00

P. Foster

EXAMINER/PARALEGAL
ASSIGNMENT BRANCH
ASSIGNMENT/CERTIFICATION SERVICES DIVISION

TECH CENTER 1600/2900

JUL 29 2002

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U.S. DEPARTMENT OF COMMERCE
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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy th reof.

① Name of conveying party(ies):

Joel S. GREENBERGER

Additional name(s) of conveying party(ies) attached? No

③ Nature of conveyance:

☒ Assignment

☐ Security Agreement

☐ Other

☐ Merger

☐ Change of Name

Execution Date: November 3, 1993

② Name and address of receiving party(ies):

Name: UNIVERSITY OF PITTSBURGH

Internal Address:

Street Address: 911 William Pitt Union

City: Pittsburgh, State: Pennsylvania, ZIP: 15260

Additional name(s) & address(es) attached? No

④ Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

08/136,079

B. Patent No.(s)

Additional numbers attached? No

⑤ Name and address of party to whom correspondence concerning document should be mailed:

Name: FOLEY & LARDNER

Internal Address:

Street Address: 3000 K Street, N.W., Suite 500

City: Washington, State: D. C., ZIP: 20007-5109

⑥ Total number of applications and patents involved: 1

⑦ Total fee (37 C.F.R. § 3.41). \$40.00

☒ Enclosed

☐ Authorized to be charged to deposit account

⑧ Deposit account number: 19-0741

(Attach duplicate copy of this page if paying by deposit account)

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⑨ Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Stephen A. Bent

Name of Person Signing

Signature

December 14, 1993

Date

93425612

Total number of pages including cover sheet, attachments, and document: 3

Mail documents to be recorded with required cover sheet information to:
Commissioner f Patents & Trad marks, Box Assignments
Washington, D.C. 20231

ASSIGNMENT

For good and valuable consideration received of the hereinafter Assignee, receipt of which is hereby acknowledged, the undersigned Joel S. GREENBERGER hereby sell and assign to UNIVERSITY OF PITTSBURGH having a place of business at 911 William Pitt Union, Pittsburgh, PA 15260, its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention in

**PROTECTION FROM IONIZING IRRADIATION OR
CHEMOTHERAPEUTIC DRUG DAMAGE BY IN VIVO GENE THERAPY**

as set forth in his United States Patent Application

— executed concurrently herewith
— executed on
XX Serial No. 08/136,079 filed October 15, 1993

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to assure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

REF 16883
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08

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The undersigned hereby grant the firm of FOLEY & LARDNER the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

Date: 11/3/93

Inventor: *Joel S. Greenberger*
Joel S. GREENBERGER

Post Office Address:

749 Chestnut Road
Sewickley, Pennsylvania 15143-1143

Date: 11-3-93

Witness: *Patricia Sedlak*

Date: _____

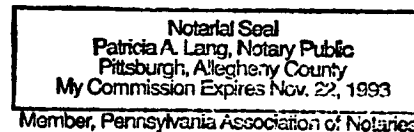
Witness: _____

:
: SS
:

Before me personally appeared the above named Joel S. GREENBERGER who acknowledged the execution of the foregoing instrument as his free act and deed.

Date: 11-3-93

Patricia A. Lang
Notary Public



NEELB 883 FRANK 09



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MARCH 13, 1996

STEPHEN A. BENT
FOLEY & LARDNER
3000 K STREET, N.W., SUITE 500
WASHINGTON, D.C. 20007

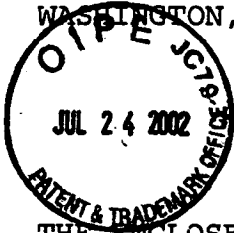
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RECORDATION DATE: 09/25/1995

REEL/FRAME: 7697/0730

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GREENBERGER, JOEL S.

DOC DATE: 08/02/1995

ASSIGNEE:

UNIVERSITY OF PITTSBURGH
OFFICE OF TECHNOLOGY TRANSFER
911 WILLIAM PITT UNION
PITTSBURGH, PENNSYLVANIA 15260

SERIAL NUMBER: 08484836

FILING DATE: 06/07/1995

PATENT NUMBER:

ISSUE DATE:

JOANN STEWART, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

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TECH CENTER 1600/2900

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A/D

11-27-1995

FORM PTO-1595 (modified)
(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/99)



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Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Joel S. GREENBERGER

11/03/95

Additional name(s) of conveying party(ies) attached? No

2. Name and address of receiving party(ies):

Name: University of PittsburghInternal Address: Office of Technology TransferStreet Address: 911 William Pitt UnionCity: Pittsburgh, State: PA ZIP: 15260

3. Nature of conveyance:

- ☒ Assignment - Merger
☐ Security Agreement - Change of Name
☐ Other

Execution Date: August 2, 1995Additional name(s) & address(es) attached? No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

08/484,836

B. Patent No.(s)

Additional numbers attached? No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Stephen A. BentInternal Address: FOLEY & LARDNERStreet Address: 3000 K Street, N.W., Suite 500City: Washington, State: D.C. ZIP: 200076. Total number of applications and patents involved: One7. Total fee (37 C.F.R. § 3.41). \$40.00☒ Enclosed☐ Authorized to be charged to deposit account8. Deposit account number: 19-0741

(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Stephen A. Bent

Name of Person Signing

Signature

September 25, 1995

Date

Total number of pages including cover sheet, attachments, and document: 2

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box 33752

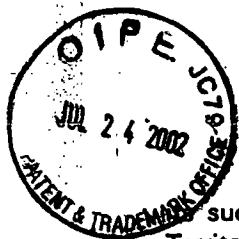
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10/11/95 08484836
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ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto



UNIVERSITY OF PITTSBURGH
911 William Pitt Union
Pittsburgh, PA 15260

successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention in

PROTECTION FROM IONIZING IRRADIATION OR CHEMOTHERAPEUTIC DRUG DAMAGE BY IN VIVO GENE THERAPY

as set forth in his United States Patent Application

— executed concurrently herewith
— executed on _____
XX Serial No. 8/484,836 filed June 7, 1995

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

The undersigned hereby grant the firm of FOLEY & LARDNER the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS		
Name: Joel S. GREENBERGER	Signature: <i>Joel S. Greenberger</i>	Date: 8/2/95
Name:	Signature:	Date:
Name:	Signature:	Date:

NAMES AND SIGNATURES OF WITNESSES		
Name: Patricia Sedlak	Signature: <i>Patricia Sedlak</i>	Date: 8-2-95
Name: Beth Dudley	Signature: <i>Beth Dudley</i>	Date: 8-2-95

Note: Prima facie evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.